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FACTORS INFLUENCING THE ACCEPTANCE OF MOBILE MARKETING

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ABSTRACT

Emerging in different varieties, mobile advertising has developed rapidly. Companies can target specific costumers whilehaving permanent access to consumers because people carry mobile phones like walletsall the time. Despite the advantages of mobile advertising, there are many obstacles and challenges, one of which can be consumer rights regarding entering the privacy,fora mobile phones is an individual's privacy to which close attention should be paid. In addition to reviewing books and papers to collect the necessary information,the data obtained from 380 questionnaires, distributed among the statistical population at random,were analyzed. To evaluate the variables, a 5-point Likert scale was employed. Moreover, Pearson correlation and regression were usedin SPSS and Smart PLS to analyze data. This study investigated the theoretical and practical concepts pertaining to the acceptance of mobile marketing among young consumers. The reported findings indicated the roles of two factorsincluding personal attachment and risk acceptancein accepting mobile marketing methods. The proposed model emphasizes the role of marketing-related and value-based mobile phone activities in mediating the relationship between the abovementioned factors and the acceptance of mobile marketing.

Keywords: Mobile Marketing, Acceptance of Mobile Marketing, Risk Acceptance, Personal Attachment

INTRODUCTION

Influencing the global economy, one of the most important industries in the telecommunication industry is becoming world. Along with developments in this

industry, images, audios, videos and data can be increasingly transmitted faster and with higher quality. As a result of such developments, the environments of companies operating in this industry become volatile, and marketers seek to create a sustainable competitive advantage through innovation and customer satisfaction (Groneros, 2004). Using marketing tools in each industry can help it experience the growth of economy and revenue. Technology has also entered the realm of business and resulted in electronic commerce. One of the branches of e-commerce is mobile commerce (m-commerce) which is actually commerce on mobile phones in details. M-commerce enables companies to be in direct touch with their customers. The commercial models used to achieve success in mobile advertising should take advantage of advertisement along with communications. The way mobile advertising influences audiences is one of the most important problems to which the marketing and advertising science has long been paying attention (Younes, Gao and Sim, 2003). Since a mobile device is characterized with unique features to send appropriate information to a special place and at a particular time, it has become a very powerful medium in marketing.

The Statement of Problem and the Need for Research

As one of the modern methods of advertising, mobile advertising has a special place among other methods in this area. Sending advertising messages to a plethora of target customers in the shortest time is one of the advantages which distinguish this advertising approach from other similar methods. Investigating different service and manufacturing companies throughout the world including the USA, European countries, and Asian ones such as Korea, Japan and China indicates the growing trend of this advertising method which has drawn much more attention than before. Therefore, it is predicted that this advertising method will become more popular in e-commerce in the next decades (Zhang and Mao, 2008). One of the latest and best methods of electronic advertising is through mobile phones, a method which is called mobile advertising. Since the cost and size of sending a large number of advertising messages to customers is really low in this method, it has increasingly been used. Developments in wireless Internet and mobile communication networks, this method has been paid attention to by business companies in a way that investment in this form of advertising has been considerably increased in the recent decade.

Development in wireless Internet and mobile communication networks have provided companies with many new advertising opportunities (Coch, 2001). Although mobile advertising is a newly-established industry, predictions indicate its rapid growth in the future. Nowadays mobile advertising has become the best targeted advertising medium which provides target messages for the consumers of available advertising channels (like radio, TV and email) in a new way. The market of mobile advertising grew from 16 million dollars to 23 million dollars in 2005 (Kim, 2002). The ownership of a mobile phone and the increasing use of it along with its rapid compatibility with wireless technology have turned mobile advertising into an important and newly-emerged communication channel in advertising strategy. The reason why mobile advertising has gained marketing importance can be explained that the customers having mobile phones carry their devices everywhere all the time, so this provides marketing managers with an opportunity to have an appropriately peer-to-peer visual and audio relationship with customers. In this regard, the special short messaging services have been very successful (Soltan, Rohem and Gao, 2009). The position of mobile advertising and its impact on the customers' awareness and

encouragement have made investment in this advertising technology become more important. Nowadays the expenditures spend on mobile advertising has been increasingly growing in comparison with other advertising methods. However, statistics indicate that the growth of income resulting from this advertising method has been much higher than the expenditures spent on it. In other words, the expenditures of mobile advertising in the USA in 2008 was about 648 million dollars, and it is predicted that this number reaches around 3.3 billion dollars by 2013. However, the incomes resulting from it will exceed 3 billion dollars in 2013 (Zo, Jingjon and Liao, 2008). Recent studies indicated that 90% of famous brands are planning to commence mobile advertising from 2008, and more than a half of such brands plan to allocate 25% of their total budget to mobile marketing activities. The predictions pertaining to the expenditure range of mobile marketing are between 9 and 19 billion dollars for 2011 (Li *et al.*, 2006). Given the fact that global brands like Burger King, Coca-Cola, Procter & Gamble, Ford and others have recently set up their mobile marketing programs enabling consumers to search for the nearest restaurant, receive discount coupons, access information on new cars, or simple get in touch with others, the

abovementioned predictions are not so surprising. Such mobile advertisements and commercial campaigns have highly been welcomed (Komolani *et al.*, 2006). In fact, increasing the use of text messaging, search technologies which are aware of position and development of brand mobile networks, wireless and mobile global marketing platforms and applications, companies have started fundamental changes in the way brands and consumers interact with each other. Nowadays mobile advertising has rapidly developed in different forms. Companies can target specific customers with permanent access to consumers. Despite the advantages of mobile advertising, there are many obstacles and challenges, one of which consumers' rights regarding entering the privacy because a mobile phone is an individual's privacy which should be paid attention to (Soltan, Roham and Gao, 2009). The way advertisements influence audiences is one of the most important problems which the advertising and marketing science has long been paying attention to. Since mobile devices are characterized with unique features enabling individuals to send information which is appropriate with a specific time and location, they have become powerful media in advertising. Therefore, it is apparently more essential to investigate the acceptance

of mobile advertising on the side of audiences than before (Lipanimi and Carjeloto, 2005). The role of marketing is undeniable in today's very competitive world. It is an industry which is considered to be among the first infrastructures in every country, and improving methods and strategies make the wheels of development move. Some of the up-to-date advertising and marketing methods in developed countries are done at lower costs and with higher returns; therefore, in our beloved Iran, it is practically impossible to apply new and up-to-date methods due to high costs and low returns because marketing and advertising depends on politics, the general economy of country, scientific and cultural growth and other reasons. Nevertheless, during recent years, the growth and development of new advertising and marketing methods were witnessed to be used in the projections of housing, recreational, business, office and town constructions. If it is accepted that the future competition is a global and professional one, being aware of international, global and competitive trading and marketing tools can provide conditions for improving the competitive impetus. When the competition gets harder and more intense, specialized marketing and sales will replace general marketing. It is really essential to comprehend different

concepts, techniques, tools and mechanisms for sales and marketing for the transition from current marketing to modern and competitive marketing. In this regard, this paper intended to investigate the factors influencing the consumer acceptance of mobile advertising.

Research Background

Some of the Previous Studies Conducted in Iran

1. In 2010, Maliheh Siavoshi and Bahareh Abedin conducted a study to investigate individuals' attitudes and reactions to receiving advertising messages in the realm of information and communication technology. The results indicated that mobile phone users' perspectives towards advertising messages were quite positive. This result is considerable in comparison with the results of other studies conducted in other countries believing otherwise. The authors of this study believe that this result can be attributed to the fact that this medium is newly-emerged in Iran.
2. In 2009, Noor Muhammad Yaghoubi and RoyaShakeri carried out a study in relation to the models of technology acceptance with an analytical-comparative approach. The results of comparing the technology acceptance models indicated that selecting a model out of different models of accepting technology would depend on the technology considered by users, precision,

available time and financial resources, environmental circumstance, important factors in author's opinion and the general economic conditions along with the available circumstances.

3. In a paper entitled "*Identifying the Factors Influencing the Avoidance of Advertising Messages*", Derakhshanet al. (2012) concluded that mental norms had a positive impact on pessimism towards advertising messages. In fact, if influential people and the members of reference groups of mobile phone users have negative attitudes towards advertising messages and do not accept them, an individual will be affected by pessimism about such messages as a result.
4. In a paper entitled "*Investigating the Factors Influencing the Attitude towards General Advertisements and Mobile Advertising*", Vaziriet al. (2011) investigated and compared the attitude of society towards general advertisements and mobile advertising. It was concluded that three factors including resentment, communication, and reliability influenced the attitude, and the attitude towards general advertisements and mobile advertising was positive.

Some of the Studies Conducted Abroad

1. In 2006, Su Feng Li et al. conducted a study to investigate customers' perceptions of mobile. Distributing 400 questionnaires to students, university employees and those

who were active in business, they collected data. After analyzing data, they found out that mobile phone users' attitudes were negative towards advertising shore messages.

2. In 2007, Jung Hu and John D. Lekenby conducted a study to investigate the attitude toward mobile advertising and individuals' behaviors after receiving such messages. Using an online questionnaire, the university students' opinions were collected in Korea and America. It appears that this study is still in progress, and the results have not been reported yet.
3. In 2007, Debby Vigar Alice conducted a study in relation to the perceptions of marketing with short messages. Using a written questionnaire and simple sampling method, data were collected from 300 students aged between 18 and 24 at the Universities of KwaZulu-Natal. Almost 60% of respondents did not disagree with receiving advertising messages. It is more probable that women show positive reactions towards advertising short messages.
4. In 2007, Alexander Mock carried out a study to investigate the impact of culture on the acceptance of mobile advertising. The study was conducted on American and Taiwanese customers. Distribution questionnaires among students who were below 25 years of age at two universities in America and two universities in Taiwan, the data were collected. The sample included 178 Americans and 198 Taiwanese. The culture influenced the tendency towards the acceptance of mobile advertising. The cultural values of advertising SMSs are among the important factors influencing the acceptance of advertising SMSs.
5. Chong *et al.* (2007) used the hybrid theory of accepting and using technology to conduct a study investigating the acceptance of supporting systems technologies among physicians. Their findings indicated that both variables of expectations of performance and expectations of effort had positive and significant impacts on the intention of using technology. The relationship between the social impact of intention of use and the relationship of facilitating conditions were also confirmed with using behavior.
6. Using the hybrid theory of acceptance and use of technology, Gupta *et al.* (2008) studied the acceptance of information and communication technology in Indian governmental organizations. Their findings indicated that the expectations of performance and expectations of effort, social influence and facilitating conditions had a positive and significant relationship with the use of information and communication technology. In this study,

the impact of the mediating variable of gender was not significant on the relationships in the model.

7. Anderson *et al.* (2006) used the hybrid theory of acceptance and use of technology to determine the impetuses and factors moderating the acceptance of Tablet PC at the agricultural faculty. The findings indicated that the credibility of the structures of model were confirmed, and the variable of expectations of performance was known to be the most important impetus for the acceptance of technology.
8. Carlson *et al.* (2006) also used this theory to explain the acceptance of mobile technologies and services in Finland. Their research results indicated that the relationship which the structure of tendency to use had with the expectations of performance and the expectations of effort. However, the structure of social impact did not have a significant relationship with the intention of using such services.
9. In a paper entitled “*Consumers’ Attitude towards Mobile Advertising: An Empirical Study*”, Tsang *et al.* (2004) stated that there was a relationship between consumers’ attitude towards receiving SMSs based on mobile advertising and their behavior intention. The attitude is mainly negative unless the advertising messages are sent with permission.
10. In a paper entitled “*Mobile Marketing and Consumers’ Behavior in the Process of Current Research*”, Lamareh, Antonio *et al.* (2012) stated that the use of mobile marketing along with direct and constant relationship with consumers would result the frequent relationship between the brand and customers in a way that it increases the long-term sales potentially and results in a competitive advantage.
11. In a paper entitled “*Consumers’ Attitude towards Mobile Advertising, the Role of Permission and Its Impact on the Intention of Purchase: A Case Study in Malaysia*”, MahdNour (2013) stated that consumers’ attitude towards mobile advertising was still unclear. The research results indicated that there was considerable relationships between consumers’ attitude, mental norms, and the control of perceived behavior and intention among consumers.
12. In a paper entitled “*Attitude towards Mobile Advertising – Investigations of Determining Different Attitudes among Adolescents and Adults*”, Anal, Sotapet *et al.* (2011) investigated adolescents and adults’ attitude towards mobile advertising in Turkey and concluded that adolescents’ attitudes towards mobile advertising were more positive than those of adults’. It was also indicated that adolescents accepted mobile advertising more and taken in into consideration in their decisions.

13. In a paper entitled “*The Impact of Mobile Advertising and Consumers’ Behaviors on Retailers*”, Cocker (2013) stated that consumers could be influenced by mobile advertising if the sent messages were sent to the person of interest in the right place at the right time.
14. In a study entitled “*Consumers’ Attitude towards Mobile Advertising*”, Freeman (2010) investigated consumers’ attitude towards mobile advertising with theories in social psychology, advertising, and mobile phone users’ behavior and concluded that when the advertiser was able to aim at consumers’ needs with respect to the available information of consumers, the attitude towards mobile advertising would be high.

executing processes like interviewing, observing and investigating the research background and theoretical literature. The current research used the following conceptual model in which the research factors and dimensions were adopted from a study conducted by Soltan, Roham and Gao in 2009. Given the research objectives and based on the literature review, the following conceptual model has been codified. In this study, the elements like risk acceptance and personal attachment were the research independent variables while marketing-related mobile activity was considered the mediating variable, and the acceptance of mobile marketing was taken as the final dependent variable. Given the research variable and hypotheses, the conceptual model can be like Figure 1.

Research Study Model

The conceptual model indicates the relationships between variables after

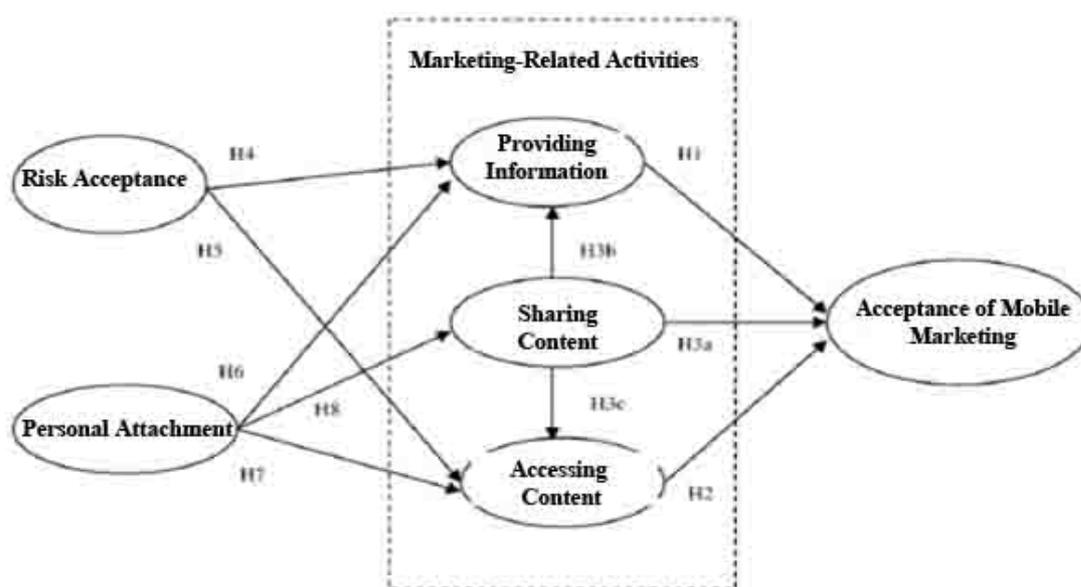


Figure 1: The Research Conceptual Model

Defining Research Variables

1. **Risk Acceptance:** The concept of risk acceptance refers to the probability of providing personal information for online institutions like websites by respondents. In this study, risk acceptance was evaluated along with other indices such as tendency to provide personal information to participate in online mobile advertising in order to get gifts, take part in a competition or have discounts in future.
2. **Personal Attachment:** The concept of personal attachment is assessed with the Likert scale and indices such as consumers' tendency towards customizing their mobile phones with backgrounds, ringtones and unique content as a way of expressing that their cellphones are devices to expand their thoughts.
3. **Providing Information:** Providing information is one of the mediating factors influencing the acceptance of mobile marketing by the consumers of middle marketing environments evaluated with indices such as submitting an email address to a website, signing up on a website on a mobile phone or signing up in a competition on a mobile device.
4. **Accessing to Content:** Accessing to content is one of the mediating factors influencing the acceptance of mobile marketing by mid-marketing consumers evaluated with indices such as loading content (background image, ringtone, etc.) on cellphones, access to attractive content, paying money for contents like games and so on.
5. **Sharing Content:** Sharing content is one of the mediating factors influencing the acceptance of mobile marketing by mid-marketing consumers evaluated by indices such as receiving interesting contents from friends and sending such contents to them.
6. **Mobile Acceptance:** The acceptance of mobile marketing, which is evaluated with the behavioral tendency towards mobile marketing, is one of the output key variables in this study. Generally, behavioral tendency is defined as the power of an individual's intention to show a particular behavior (Fishbein and Azjen, 1975). In this study, mobile acceptance was evaluated with indices such as people's viewpoints and intentions to participate in activities like receiving marketing communications pertaining to products or information and marketing issues on their cellphones.

Research Hypotheses

Based on the conceptual model, the research hypotheses are as follows:

H1: More mobile activities in relation to providing information with companies for marketing goals increase the levels of the acceptance of mobile marketing.

H2: More mobile activities in relation to accessing contents increase the levels of the acceptance of mobile marketing.

H3a: More mobile activities in relation to sharing content with others increase the levels of mobile marketing.

H3b: More mobile activities in relation to sharing content with others result in more mobile activities in providing companies with information for marketing-related goals.

H3c: More marketing activities in relation to sharing content with others increase more mobile activities in accessing content.

H4c: Higher levels of risk acceptance increase mobile activities in relation to providing companies with information for marketing-related goals.

H5: Higher levels of risk acceptance increase mobile activities related with accessing to content in the mobile environment.

H6: Higher levels of personal attachment result in more mobile activities in relation to providing companies with information for marketing-related goals.

H7: Higher levels personal attachment result in more mobile activities in relation to sharing content with others in mobile environments.

H8: Higher levels of personal attachment result in more mobile activities in relation

to accessing content in mobile environments.

RESEARCH METHOD

This is a descriptive-applied study in which the field method was used to collect data. The main data collection tool was a questionnaire including 2 parts, first of which was about demographic characteristics, and the second part had the main research questions. The questionnaire had 17 items classified under 6 proposed structures. The 5-point Likert scale (from 1=totally disagree to 5=totally agree) was used for the main questions. Cronbach's alpha coefficient was used to determine the reliability of questionnaire.

The Statistical Population and Sample

The statistical population included students studying in the Academic Year 2014-2015 at universities in Rasht County. It should be mentioned that the number of students is variable over time. In this study, the number of students is related to the study period. This is a field study. The necessary information was collected through a questionnaire, some goals of which were to evaluate the relationship between risk acceptance and personal attachment in the acceptance of mobile marketing and to investigate the impacts of the mediating variable of mobile activity associated with marketing in this relationship. After designing the question, it was distributed

among 40 students in Rasht for the preliminary test, and the results were then evaluated. After an initial investigation, the reliability and structural credibility of scales and items were confirmed. Considering the statistical population, the simple random sampling method was used in this study, and the questionnaires were distributed among students in determined numbers. The research data were collected from 380 students studying at universities in Gilan, after distributing 435 questionnaires among students studying in the Academic Year 2014-2015 with the simple random sampling method. Then 440 questionnaires were returned. Among them, 34 questionnaires could not be used. Finally, 380 questionnaires were analyzed. The return rate of questionnaires was almost 78%. Due to the research type and also faster access to respondents' opinions, the best way was considered in this study to collect data. The evaluated indices in this study were judged by the advisor and supervisor rather than being assessed in the questionnaire. Finally, the agreed questionnaire was used as the data collection tool. One of the most important research steps is to codify the evaluation tool. This questionnaire included 17 questions in total. At first, there was an introduction to explain the subject being questioned. Then the questions were

presented in two parts. In general questions, it was tried to collect general information and demographics pertaining to characteristics like age, gender, marital status, and students' educations. In the specialized part, pertaining to the research hypotheses, there were 17 questions, 6 of which were about the independent variable including risk acceptance (3 questions), personal attachment (3 questions) (Mahorta, Kim and Agraval (2004); Soltan, Roham and Gao (2009)). Moreover, there were 8 questions pertaining to marketing-related mobile activities including providing information (3 questions), sharing content (2 questions), and accessing content (3 questions) (Grant and Odno (2007); Soltan, Roham, and Gao (2009)). This questionnaire also included 3 questions to evaluate the acceptance of mobile marketing (Barvize and Strong (2002); Soltan, Roham and Gao (2009)). The 5-point Likert scale, which is one of the most common measurement scales, was used to design these questions.

Among various methods of determining the credibility, validity was used for this study. In other words, a number of researchers and pundits were asked about the accuracy and transparency of the questions in the questionnaire. Therefore, the skilled experts like the advisor and supervisor confirmed the credibility of questionnaire. To

determine the reliability of questionnaire, Cronbach's alpha coefficient was used. This method is employed to calculate the internal correlations of the measurement tools including questionnaires or the tests measuring different characteristics. The researcher reviewed and localized the indices with the help of the advisor and supervisor. Therefore, the indices used in this questionnaire were matched with the special characteristics of the research atmosphere. Cronbach's alpha coefficients pertaining to risk acceptance, personal attachment, providing information, sharing content, accessing content, and the acceptance of mobile advertising were 0.802, 0.911, 0.851, 0.846, 0.782, and 0.805, respectively.

Research Findings: Data Analysis and Hypotheses

Among 380 respondents, there were 159 men (contributing to 41.85% of the sample size), and there were 221 women (contributing to 58.15%). There were 236 single subjects (contributing to 62.10% of the sample size) while the rest of them were married (144 subjects contributing to 37.9%). Regarding respondents' education

degrees, it was clarified that 252 subjects (66.31%) had bachelor degrees while 119 subjects (31.31%) had master degrees, and 9 respondents (2.38%) were studying PhD. Furthermore, 242 subjects (63.68%) were below 25 years of age while 104 subjects (27.36%) were between 25 and 35 years of age, and 34 subjects (8.96%) were above 35. In this study, SPSS and Smart PLS were used to analyze data. When the research variables include latent and visible variables, and it is intended to study the simultaneous impact of latent variables on each other or on visible variables, the structural equation modeling is used. Given the simultaneous impacts of variables on each other, the results and the research general model implemented and executed in Smart PLS as follows. The following figure shows the results of factor structures in the standard mode.

According to the figure 2, it can be understood that Hypotheses 1, 2, 4, 6, 7, 9 and 10 were confirmed. In other words, they cannot be rejected. However, Hypotheses 3, 5 and 8 can be rejected. The significance of the impact factors were estimated, and the results of testing the research hypotheses can be seen in Table 1.

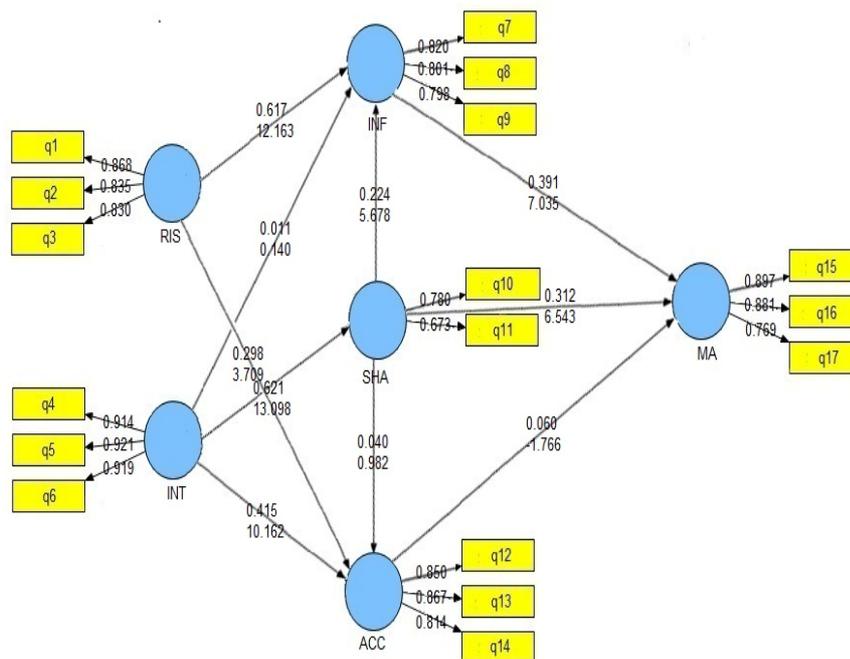


Figure 2: The Research Conceptual Model Test

Table 1: The Significance of Estimated Impact Factors and the Results of Testing Research Hypotheses

Hypothesis	Relationship	Estimating Sample	Mean of Sub Samples	SD	t	Result
1	The Impact of Providing Information on the Acceptance of Mobile Marketing	0.391	0.6056	0.0311	7.035	Confirmed
2	The Impact of Accessing Content on the Acceptance of Mobile Marketing	0.312	0.5466	0.0720	6.543	Confirmed
3	The Impact of Sharing Content on the Acceptance of Mobile Marketing	0.060	0.1631	0.1495	-1.766	Rejected
4	The Impact Sharing Content on Providing Information	0.224	0.4913	0.0568	5.678	Confirmed
5	The Impact of Sharing Content on Accessing Content	0.040	-0.1375	0.1668	0.982	Rejected
6	The Impact Risk Acceptance on Providing Information	0.617	0.8434	0.0310	12.163	Confirmed
7	The Impact of Risk Acceptance on Accessing Information	0.298	0.3161	0.0491	3.709	Confirmed
8	The Impact of Personal Attachment on Providing Information	0.011	-0.0557	0.1427	0.140	Rejected
9	The Impact of Personal Attachment on Accessing Content	0.621	0.6960	0.0233	13.098	Confirmed
10	The Impact of Personal Attachment on Sharing Content	0.415	0.4717	0.0389	10.162	Confirmed

The first research hypothesis states that more mobile activities for providing companies with information for marketing goals increase the levels of acceptance of mobile marketing. Regarding this hypothesis, the results of correlation analysis indicated that it was confirmed.

The path coefficient of the variable of providing information on the levels of accepting mobile marketing (0.391) when the value of *t* was equal to 7.035 was significant at the error level of 0.05. These results indicated a direct relationship between these two variables; therefore, the

first research hypothesis was confirmed. The second research hypothesis states that more mobile activities for accessing content increase the levels of acceptance of mobile marketing. Regarding this hypothesis, the results of correlation analysis indicated that it was confirmed. The path coefficient of the variable of accessing content on the levels of accepting mobile marketing (0.312) when the value of t was equal to 6.543 was significant at the error level of 0.05. These results indicated a direct relationship between these two variables; therefore, the second research hypothesis was confirmed. The third research hypothesis stated that more mobile activities for sharing content with others increase the levels of acceptance of mobile marketing. Regarding this hypothesis, the results of correlation analysis indicated that it was rejected. The path coefficient of the variable of sharing content on the levels of accepting mobile marketing (0.060) when the value of t was equal to -1.766 was not significant at the error level of 0.05. These results indicated the lack of a relationship between these two variables; therefore, the third research hypothesis was rejected. The fourth research hypothesis stated that more mobile activities for sharing content with others result in more mobile activities for providing companies with information for

marketing goals. Regarding this hypothesis, the results of correlation analysis indicated that it was confirmed. The path coefficient of the variable of sharing content on providing information (0.224) when the value of t was equal to 5.678 was significant at the error level of 0.05. These results indicated a direct relationship between these two variables; therefore, the fourth research hypothesis was confirmed. The fifth research hypothesis stated that more mobile activities for sharing content with others result in more mobile activities for accessing content. Regarding this hypothesis, the results of correlation analysis indicated that it was rejected. The path coefficient of the variable of sharing content on accessing content (0.040) when the value of t was equal to 0.982 was not significant at the error level of 0.05. These results indicated the lack of a relationship between these two variables; therefore, the fifth research hypothesis was rejected. The sixth research hypothesis stated that higher levels of risk acceptance increase mobile activities for providing companies with information regarding marketing-related goals. Regarding this hypothesis, the results of correlation analysis indicated that it was confirmed. The path coefficient of the variable of risk acceptance on providing information (0.617) when the value of t was equal to 12.163 was significant at the error

level of 0.05. These results indicated a direct relationship between these two variables; therefore, the sixth research hypothesis was confirmed. The seventh research hypothesis stated that higher levels of risk acceptance increase mobile activities related to accessing content in mobile environment. Regarding this hypothesis, the results of correlation analysis indicated that it was confirmed. The path coefficient of the variable of risk acceptance on accessing content (0.298) when the value of t was equal to 3.709 was significant at the error level of 0.05. These results indicated a direct relationship between these two variables; therefore, the seventh research hypothesis was confirmed. The eighth research hypothesis stated that higher levels of personal attachment result in more mobile activities for providing companies with information on marketing-related goals. Regarding this hypothesis, the results of correlation analysis indicated that it was rejected. The path coefficient of the variable of personal attachment on providing information (0.011) when the value of t was equal to 0.140 was significant at the error level of 0.05. These results indicated the lack of a relationship between these two variables; therefore, the eighth research hypothesis was rejected. The ninth research hypothesis stated that higher levels of personal attachment result

in more mobile activities for sharing content with others in the mobile environment. Regarding this hypothesis, the results of correlation analysis indicated that it was confirmed. The path coefficient of the variable of sharing content with others (0.621) when the value of t was equal to 13.098 was significant at the error level of 0.05. These results indicated a direct relationship between these two variables; therefore, the eighth research hypothesis was confirmed. The tenth research hypothesis stated that higher levels of personal attachment result in more mobile activities for accessing content in the mobile environment. Regarding this hypothesis, the results of correlation analysis indicated that it was confirmed. The path coefficient of the variable of personal attachment on accessing content (0.415) when the value of t was equal to 10.162 was significant at the error level of 0.05. These results indicated a direct relationship between these two variables; therefore, the tenth research hypothesis was confirmed. As observed, the results of testing the first research hypothesis were consistent with the results of studies conducted by Kim in 2002; Mahorata, Kim and Agraval in 2004; and Soltan, Roham and Gao in 2009.

DISCUSSION AND CONCLUSION

This study introduced some conceptual problems regarding the theoretical and practical cases pertaining to the antecedent factors of the acceptance of mobile marketing among young consumers in mobile market. The reported findings indicated the roles of two antecedent factors i.e. personal attachment and risk acceptance in relation to the acceptance of mobile marketing. The research results showed that risk acceptance and personal attachment influenced mobile activities such as providing information, sharing content and accessing content; therefore, they resulted in the acceptance of mobile marketing. Higher levels of risk acceptance considerably influenced the likelihood of participating in mobile activities pertaining to accessing content. Higher levels of personal attachment influenced mobile activities pertaining to accessing content and sharing content; however, they did not have any impacts on providing information. In total, it can be stated that explaining the problems pertaining to the perceived risk and penetration to the personal privacy, especially in mobile advertising, the previous study is supported in an online environment. This study also supports the previous studies (for instance, studies conducted by Zho and Kramer in 2006) and explains the role of personal attachment which may be clarified as an antecedent

factor through customized features and content. This factor influences the acceptances of mobile advertising indirectly through accessing mobile content and sharing it. This matter indicates that young individuals would consider mobile phones to be a reflection of their identity/personality and a device showing the status representing their personal identity. Therefore, the role of their mobile phones is similar to other fashionable items in this regard. On the contrary, personal attachment can also influence mobile activities in the form of content and sharing it. This finding is important in case future theories are to be broadened because it clarifies the role of social acceptance within special groups of consumers as an index for the acceptance of technology more than before.

This study also investigated the mediating impacts of mobile activities including providing information, accessing content and sharing content on the acceptance of mobile marketing. The probability of providing information by respondents and accessing information were the considerable influences on acceptance on the acceptance of mobile marketing. This indicates that consumers' use of mobile phones in order to provide information and share content can operate as a preparatory factor for future participations in mobile

marketing. One of the surprising findings was the fact that the probability of sharing content did not influence the acceptance of mobile marketing directly. In addition, the probability of sharing content had a considerable impact on the probability of providing information for marketing companies. Nevertheless, the probability of sharing content did not have a determining impact on the probability of accessing information. These two findings can be explained with respect to this point that there may be less tendency to access content because of the increased personal concerns regarding privacy. This reluctance has been evaluated with the levels of risk acceptance. One of the concepts pertaining to this finding states that the stimulation of mobile activity through value-based and trust-based approaches to motivate individuals to provide information, access content and share content can indicate one of the key steps to improving an individual's intention of participating mobile marketing. Some factors were found in this study. They influenced the acceptance of mobile marketing directly and indirectly. These factors include the probability of providing information, the probability of risk acceptance and the level of personal attachment to one's own mobile phone. To managers, this problem indicates that one group of mobile applications

targeting young consumers, such as The Yard which was implemented by Sprite Coca-Cola in 2007, should emphasize significant impetuses and appropriate statements of value so that consumers can provide them with personal information. They should also provide customers with convincing content to stimulate the proliferative activity and perceive the replacement relationships which consumers many create with respect to risk tolerability and advantages. In practice, consumer's tendency to participate in the applications of mobile marketing provided by companies will be most likely stimulated by incentives like the following motivational plans: free text messaging services in return for authorizing the company to send advertising messages and mobile advertising; financial factors improving the risk acceptance such as pricing plans with constant rates and customized content providing values and personal attachment based on individuals' inclinations to participate in relevant competitions. However, these findings point out various obstacles existing on the way of growing mobile marketing among young consumers, a fact which managers should pay well attention to. For instance, in markets like the United States of America, there are notable considerations in general politics in which the main

stimulating factor is consumers' concerns resulting in active self-control in mobile marketing industry and privacy-protecting policies. To create strategies of encouraging consumers and their participation in the atmosphere of mobile marketing, managers should understand how much the privacy-related subjects can be problematic for different types of participations among various groups of consumers (beyond the mere consumers' use) and markets. Although only young markets were studied, the study conducted by Forster indicated that 80% of European customers stated their concerns on privacy in mobile marketing via text messaging throughout Europe (Forster, 2001). In this study, the efforts made to create the code of ethics and to protect the privacy such as controlling and selecting customer, marketers' limits and reliability were indicated very well. Therefore, considering the replacement relationship between delivering value to the user without investing in customer risk acceptance or taking advantage of it in mobile marketing will be important for participants. One of the participation approaches after getting the permission from mobile user, which was earlier discussed, is customization relating to targeting individuals accurately with content, characteristics and value-based plans in proportion with their needs.

Another approach can include a model based on a motivational plan in which users accept to receive the sent advertisements in return for free access and mobile content. Managers should concentrate on customization and models for trust or models based on motivational plans to encourage customers to participate more in the applications of mobile marketing. The brands which entered and compete both in newly-emerged and accepted markets may seek to emphasize the mobile platform for advertising efforts so that they can invest in the characteristics of acceptance such as the current mobile activities and increase the usability of mobile devices. In addition, the prominence of mobile activities (hedonic and utilitarian) in the accepted and newly-emerged markets was considered to be the factor influencing the acceptance of mobile marketing to point out the importance delivering value and content to make the mobile environment desirable and acceptable for users (for instance, entertaining content or informational content like position-based search tools). For instance, it is possible to be proven that programs like mobile TV delivering a unique content in the mobile environment can be successful for the presentation of advertising content or programming in the future. The perception of different obstacles and impetuses for the acceptance of mobile

advertising among the consumers of global markets is very important for managers. The research findings present some concepts for the managers involved in the development of programs and navigation of mobile marketing. This study indicated that managers should understand the impact of personal attachment and needs for the customization of mobile phones on young users. These findings also indicated that managers would want to create mobile strategies in the future in order to stimulate proliferative mobile activities such as sharing content to result in more tendency towards participation in the programs of mobile advertising.

REFERENCES

1. Derakhshan, Afshin, A. Sh., 2012, "Identification of Factors Influencing the Avoidance of Advertising Messages", the Seasonal of Modern Economics and Trading, No. 17 and 18, Summer and Fall 2010, pp. 158 and 172
2. Rutivand, Ali, A. M. K. A., 2013, "Comparing the Effectiveness of Mobile Advertising with Other Advertising Media: A Case Study of Iran Khodro Company" Iranian Association of Industrial Engineering, January 2013
3. Siavoshi, Maliheh, A. B., 2010, "Investigating People's Attitude and Reaction to Receiving Advertising Messages in the Age of Information and Communication Technology", the Journal of Information Technology Management, Vol. 1, No. 3, Fall and Winter 2010, pp. 53 to 68.
4. Ghane, Somayeh, 2009, "Investigating the Factors Influencing Mobile Marketing"
5. Vaziri, Sadegh, 2011, "Investigating the Factors Influencing the Attitude to General Advertising and Mobile Advertising", the Fourth International Conference on Marketing Management
6. Baltas, G. (2003), Determinants of internet advertising effectiveness: an empirical study, International Journal of Market Research, Vol. 45, No. 4, PP. 505-513.
7. Barwise, P. and Strong, C. (2002), Permission-based mobile advertising, Journal of Interactive Marketing. Vol.16, No. 1, PP. 14-24.
8. Bauer, Hans H.; Stuart J. Barnes; Reichardt, Tina and M. Neumann, Marcus (2005), Driving Consumer Acceptance of Mobile Marketing: A Theoretical Framework and Empirical Study, Journal of Electronic Commerce Research, Vol. 6, No. 3, PP. 181-92.
9. Cleff, E. (2007), Implementing the legal criteria of meaningful consent in the concept of mobile advertising, computer law and security report, Vol. 9, PP. 162-174.

10. Dae-Young, Kim (2005), A Model of Tourist Acceptance for Mobile Technology, 11th annual conference of Asia Pacific Tourism Association.
11. DeZoysa, S. (2002), Mobile advertising needs to get personal, *Telecommunications International*, Vol. 36, No.2, PP. 432-456.
12. Dickinger, A; Scharl, A; Murphy, J (2005), Diffusion and success factors of mobile Marketing, *Electronic Commerce Research and Applications*, Vol. 4, No. 2, PP. 159-173.
13. Ducoffe, R.H (1996), Advertising Value and Advertising on the Web, *Journal of Advertising Research*, Vol. 36, PP. 21-36.
14. Enpocket (2003), The response performance of SMS advertising, *Research Report*.
15. Haghirian, P; Dickinger, A. (2004), Identifying Success Factors of Mobile Marketing, *Association of Consumer Research*.
16. Haghirian, p.; Madlberger, M. (2004), A Cross Cultural Analysis of Perceptions of Mobile Advertising. A Survey among Austrian and Japanese Students. *Vienna University of Economics and Business Administration*, Vol. 5, PP.3-8
17. Hans, H; Stuart, J., Barnes, Tina, R.; Marus, M. (2005), Driving consumer acceptance of mobile marketing: a theoretical framework and empirical study, *Journal of Electronic Commerce Research*, Vol. 6, No. 3, PP. 210-221.
18. Heinonen, Kristina (2003), Consumer Responsiveness to Mobile Marketing, *Stockholm Mobility Roundtable*, Vol. 21, PP. 22-28.
19. Ji-Won, Moon; Young-Gul, Kim (2001), Extending the TAM for a World-Wide-Web Context, *Information and Management*, Vol. 38, PP. 217-230.
20. Kim, Shin D. (2002), Korea: Personal Meanings, in *Perceptual Contact: Mobile Communication, Private Talk, Public Performance*, James E. Katz and Mark Aakhus, eds. Cambridge, UK: Cambridge University Press.
21. Kotch, M. (2001), Itain't all about the money: the mobile marketing opportunity, Part III, *Insight, WirelessAdWatch*, September 24.
22. Komulainen, H. Mainela T., Sinisalo J., Tahtinen J., Ulkuniemi P., (2006), Business model scenarios in mobile advertising, *International Journal of Internet Marketing and Advertising*, Vol.3, No.3, PP. 254-270.
23. Leppäniemi, M., Karjaluoto, H., and Salo, J. (2004), The success factors of mobile advertising value chain, *E-Business Review*, Vol. 4, pp. PP. 93-97.
24. Leppaniemi, M. and Karjaluoto, H. (2005), Factors influencing consumers willingness to accept mobile advertising,

- International Journal of Mobile Communications, Vol.3, No.3, PP. 197-205.
25. Lee H.S., Lee, C.H., Kim, Y.H., Lee, B.G. (2006), Analysis of the actual response rates in mobile advertising, *Innovations in Information Technology*, Vol3. PP. 111–125.
26. Lewis, S. (2001), M-commerce: ads in the ether, *Asian Business*, anuary, Vol. 37, No.1, PP. 31-42.
27. Malhotra, Naresh, K., Sung S. Kim, and James Agarwal (2004), “Internet Users' Information Privacy Concerns (IUIPC): The Construct, the Scale, and a Causal Model,” *Information Systems Research*, Vol. 15, No. 4, PP. 336–55.
28. Merisavo, M., Kajalo,S. (2007), An Empirical Study of the Drivers of Consumer Acceptance of Mobile Advertising, *Journal of Interactive Advertising*, Vol. 7, No. 3, PP. 181-192.
29. Pietz, M.; Olofsson,A. and Paulsson, M. (2009), Advertisement to Mobile Phones, Success or Failure? A study of Swedish Youths acceptance Towards Receiving Mobile Advertisement. *Swedish University Essays*.p. 23.
30. Selian, Audrey N. and Lara Srivastava (2004), *Mobile Phones and Youth: A Look at the U.S. Student Market Seoul: ITU/MIC Workshop*. March.
31. Silk, Alvin J., Lisa R. Klein and Ernst R. Berndt (2001), The Emerging Position of the Internet as an Advertising Medium, *Netnomics*, Vol.3, No.2, PP. 129–48.
32. tafford, T.F. and Gillenson M.L.(2003), Mobile commerce: what it is and what it could be, *Communications of the ACM*, Vol. 46, No. 12, PP. 321-332.
33. Sultan, F., Rohm, A.J., Gao, T. (2009), Factors Influencing Consumer Acceptance of Mobile Marketing: A Two-Country Study of Youth Markets, *Journal of Interactive Marketing*, Vol. 23, PP. 308–320.
34. Urban, Glenn R., Fareena Sultan, and William J. Qualls (2000), “Placing Trust at the Center of Your Internet Strategy,” *Sloan Management Review*, Vol. 42, No. 1, PP. 39–48.
35. Varshney, U. (2003), Location Management for Mobile Commerce Applications in Wireless Internet Environment, *ACM Transactions on Internet Technology*, Vol. 3, No. 3, pp. 236 - 255.
36. Xu, David Jingjun and Liao, Li. Qiudan (2008), Combining empirical experimentation and modeling techniques: A design research approach for personalized mobile advertising applications, *Decision Support Systems* Vol. 44, PP. 719-732.

37. Yunos, H.M., Gao, J.Z. and Shim,S. (2003), Wireless advertising's challenges and opportunities, IEEE Computer, Vol.36, No.5, PP.30–37.
38. Zhang, Jing; Mao, En (2008), Understanding the Acceptance of Mobile SMS Advertising among Young Chinese Consumers, Psychology & Marketing, Vol. 25, No.8, PP. 787-805.